

AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0043] of the published application as follows:

- - Another currently preferred embodiment of the present invention provides a molecule herein denoted MSPRO12 comprising a variable light chain (V_L) having SEQ ID NO:[94] 87 and a variable heavy chain (V_H) having amino acid SEQ ID NO:[105] 98 and the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO:[75] 68 and SEQ ID NO:[89] 82, respectively. - -

Please amend paragraph [0044] of the published application as follows:

- - Another currently preferred embodiment of the present invention provides a molecule herein denoted MSPRO2 comprising a variable light chain (V_L) having SEQ ID NO:[92] 85 and a variable heavy chain (V_H) having SEQ ID NO:[103] 96 and the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO:[74] 67 and SEQ ID NO:[84] 77. - -

Please amend paragraph [0045] of the published application as follows:

- - A currently most preferred embodiment of the present invention provides a molecule, herein denoted MSPRO59, comprising a variable light chain (V_L) having SEQ ID NO:[102] 95 and a variable heavy chain (V_H) having SEQ ID NO:[113] 106 having the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO:[76] 69 and SEQ ID NO:[91] 84, respectively. - -

Please amend paragraph [0047] of the published application as follows:

- - In one embodiment the present invention provides a molecule which binds FGFR3 and blocks ligand-dependent activation of the receptor, comprising V_H-CDR3 and V_L-CDR3 regions having SEQ ID NO:20 and SEQ ID NO:21, respectively and the corresponding polynucleotide sequence having SEQ ID NO:44 and SEQ ID NO:45, respectively. In another embodiment the present invention provides a molecule comprising a variable light chain (V_L) having SEQ ID NO:[99] 92 and a variable heavy chain (V_H) having SEQ ID NO:[110] 103, having the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO:[65] 58 and SEQ ID NO:[87] 80, respectively. - -

Please amend paragraph [0049] of the published application as follows:

- - Additional embodiments of the present invention provide molecules having an antigen binding domain comprising a V_L region and a V_H region, respectively, selected from SEQ ID NO:[93] 86 and SEQ ID NO:[104] 97; SEQ ID NO:[95] 88 and SEQ ID NO:[106] 99; SEQ ID NO: [96] 89 and SEQ ID NO:[107] 100; SEQ ID NO:[97] 90 and SEQ ID NO:[108] 101; SEQ ID NO:[98] 91 and SEQ ID NO:[109] 102; SEQ ID NO:[99] 92 and SEQ ID NO:[110] 103; and SEQ ID NO:[101] 94 and SEQ ID NO:[112] 105 and the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO:[70] 63 and SEQ ID NO:[85] 78; SEQ ID NO:[67] 60 and SEQ ID NO:[78] 71; SEQ ID NO [64] 57 and SEQ ID NO:[79] 72; SEQ ID NO:[71] 64 and SEQ ID NO:[86] 79; SEQ ID NO:[62] 55 and SEQ ID NO:[80] 73; SEQ ID NO:[65] 58 and SEQ ID NO:[87] 80; and SEQ ID NO:[69] 62 and SEQ ID NO:[83] 76. - -

Please amend paragraph [0051] of the published application as follows:

- - Another embodiment of the present invention provides a molecule comprising V_H and V_L domains of amino acid sequences having SEQ ID NO:[111] 104 and [100] 93, which has specific affinity for FGFR1 and which blocks ligand-dependent activation of FGFR1, and the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO:[82] 75 and SEQ ID NO:[73] 66. - -

Please amend paragraph [0093] of the published application as follows:

- - FIG. 28 is an example of a Fab expression vector, having SEQ ID NO:[53] 52, for use in accordance with the present invention. - -

Please amend paragraph [0094] of the published application as follows:

- - FIG. 29 is an example of a phage display vector, having SEQ ID NO:[54] 53, for use in accordance with the present invention. - -

Please amend paragraph [0095] of the published application as follows:

- - FIG. 30 depicts the polynucleotide sequences of the V_L and V_H of MSPRO antibodies of the present invention SEQ ID NOS: [61-91] 54-84. - -

Please amend paragraph [0108] of the published application as follows:

-- The polypeptide sequence of the V_H and V_L domains of the currently preferred embodiments of the present invention are presented below. **FIG. 30** provides the polynucleotide sequences of the preferred embodiments of the invention.

MS-Pro-2-VL (SEQ ID NO: [[92]]85)

1 DIELTQPPSV SVAPGQTARI SCSGDALGDK YASWYQQKPG QAPVLVIYDD
51 SDRPSGIPER FSGSNSGNTA TLTISGTQAE DEADYYCQSY DYSADYVFGG
101 GTKLTVLGQ

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Please amend paragraph [0109] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[74]] 67

MS-Pro-11-VL (SEQ ID NO: [[93]]86)

1 DIALTQPASV SGSPGQSITI SCTGTSSDVG GYNYVSWYQQ HPGKAPKLMI
51 YDVSNRPSGV SNRFSGSKSG NTASLTISGL QAEDEADYYC QSHHFYEVFG
101 GGTKLTVLGQ

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Please amend paragraph [0110] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[70]] 63

MS-PRO-12-VL (SEQ ID NO: [[94]]87)

1 DIELTQPPSV SVAPGQTARI SCSGDALGDK YASWYQQKPG QAPVLVIYDD
51 SDRPSGIPER FSGSNSGNTA TLTISGTQAE DEADYYCQSY DFDFAVFGGG
101 TKLTVLGQ

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Please amend paragraph [0111] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[77]] 68

MS-Pro-21-VL (SEQ ID NO: [[95]]88)

1 DIVMTQSPDS LAVSLGERAT INCRSSQSVL YSSNNKNYLA WYQQKPGQPP
51 KLLIYWASTR ESGVPDRFSG SGSGTDFTLT ISSLQAEDVA VYYCQQYDSI
101 PYTFGQGTKV EIKRT

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Please amend paragraph [0112] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[67]] 60

MS-Pro-24-VL (SEQ ID NO: [[96]]89)

1 DIVLTQSPAT LSLSPGERAT LSCRASQSVS SSYLAWYQQK PGQAPRLLIY
51 GASSRATGVP ARFSGSGSGT DFTLTISSE PEDFATYYCQ QMSNYPDTFG
101 QGTKVEIKRT

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Please amend paragraph [0113] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[64]] 57

MS-Pro-26-VL (SEQ ID NO: [[97]]90)

1 DIALTQPASV SGSPGQSITI SCTGTSSDVG GYNYVSWYQQ HPGKAPKLM 51
YDVSNRPSGV SNRFSGSKSG NTASLTISGL QAEDEADYYC QSYDNNSDVV 101
FGGGTKLTVL GQ

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Please amend paragraph [0114] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[71]] 64

MS-Pro-28-VL (SEQ ID NO: [[98]]91)

1 DIQMTQSPSS LSASVGDRVT ITCRASQGIS SYLAWYQQK GKAPKLLIYA
51 ASSLQSGVPS RFSGSGSGTD FTLTISLQPEDFAVYYCFQ YGSIPPTFGQ
101 GTKVEIKRT

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Please amend paragraph [0115] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[62]] 55

MS-Pro-29-VL (SEQ ID NO: [[99]]92)

1 DIVLTQSPAT LSLSPGERAT LSCRASQSVS SSYLAWYQQK PGQAPRLLIY
51 GASSRATGVP ARFSGSGSGT DFTLTISSE PEDFATYYCQ QTNNAPVTFG
101 QGTKVEIKRT

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Please amend paragraph [0116] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[65]] 58

MS-Pro-54-VL (SEQ ID NO: [[100]]93)

1 DIELTQPPSV SVAPGQTARI SCSGDALGDK YASWYQQKPG QAPVLVIYDD
51 SDRPSGIPER FSGSNSGNTA TLTISGTQAE DEADYYCQSY DYFKLVFGGG
101 TKLTVLGQ

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Please amend paragraph [0117] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[73]] 66

MS-Pro-55-VL (SEQ ID NO: [[101]]94)

1 DIALTQPASV SGSPGQSITI SCTGTSSDVG GYNYVSWYQQ HPGKAPKLMI
51 YDVSNRPSGV SNRFSGSKSG NTASLTISGL QAEDEADYYC QSYDMYNYIV
101 FGGGTKLTVL GQ

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Please amend paragraph [0118] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[69]] 62

MS-Pro-59-VL (SEQ ID NO: [[102]]95)

1 DIELTQPPSV SVAPGQTARI SCSGDALGDK YASWYQQKPG QAPVLVIYDD
51 SDRPSGIPER FSGSNSGNTA TLTISGTQAE DEADYYCQSY DGPDWLWVFGG
101 GTKLTVLGQ

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Please amend paragraph [0119] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[76]] 69

MS-Pro-2-VH (SEQ ID NO: [[103]]96)

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFT SYMHWRQA PGQGLEWMGW 51
INPNSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARDF
101 LGYEFDYWGQ GTLVTVSS

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Please amend paragraph [0120] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[84]] 77

MS-Pro-11-VH (SEQ ID NO: [[104]]97)

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFT SYMHWRQA PGQGLEWMGW 51
INPNSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARYY
101 GSSLYHYVFG GFIDYWGQGT LTVVSS

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Please amend paragraph [0121] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[85]] 78

MS-Pro-12-VH (SEQ ID NO: [[105]]98)

1 QVQLKESGPA LVKPTQTLTL TCTFSGFSLT TSGVGVGWIR QPPGKALEWL
51 ALIDWDDDKY YSTSLKTRLT ISKDTSKNQV VLTMTNMDPV DTATYYCARY
101 HSWYEMGYYG STVGYMFDYW GQGT LTVVSS

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Please amend paragraph [0122] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[89]] 82

MS-Pro-21-VH (SEQ ID NO: [[106]]99)

1 QVQLVQSGAE VKKPGSSVKV SCKASGGTFS SYAISWVRQA PGQGLEWMGG
51 IPIFGTANY AQKFQGRVTI TADESTSTAY MELSSLRSED TAVYYCARDN
101 WFKPFSDVWG QGT LTVVSS

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Please amend paragraph [0123] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[78]] 71

MS-Pro-24-VH (SEQ ID NO: [[107]]100)

1 QVQLVQSGAE VKKPGSSVKV SCKASGGTFS SYAISWVRQA PGQGLEWMGG
51 IPIFGTANY AQKFQGRVTI TADESTSTAY MELSSLRSED TAVYYCARVN
101 HWTYTFDYWG QGT LTVVSS

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Please amend paragraph [0124] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[79]] 72

MS-Pro-26-VH (SEQ ID NO: [[108]]101)

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFT SYMHWRQA PGQGLEWMGW 51
INPNSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARGY
101 WYAYFTYINY GYFDNWGQGT LTVVSS

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Please amend paragraph [0125] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[86]] 79

MS-Pro-28-VH (SEQ ID NO: [[109]]102)

1 QVQLVQSGAE VKKPGSSVKV SCKASGGTFS SYAISWRQA PGQGLEWMGG
51 IPIFGTANY AQKFQGRVTI TADESTSTAY MELSSLRSED TAVYYCARGG
101 GWVSHGYYYL FDLWGQGTLV TVSS

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Please amend paragraph [0126] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[80]] 73

MS-Pro-29-VH (SEQ ID NO: [[110]]103)

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFT SYMHWRQA PGQGLEWMGW 51
INPNSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARTW
101 QYSYFYYLDG GYYFDIWGQG TLTVSS

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Please amend paragraph [0127] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[87]] 80

MS-Pro-54-VH (SEQ ID NO: [[111]]104)

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFT SYMHWRQA PGQGLEWMGW 51
INPNSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARNM
101 AYTNQYVNM PHFDYWGQGT LTVVSS

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Please amend paragraph [0128] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[82]] 75

MS-Pro-55-VH (SEQ ID NO: [[112]]105)

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFT SYMHVWRQA PGQGLEWMGW 51
INPNSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARSM
101 NSTMYWYLRR VLFDHWGQGT LVTVSS

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Please amend paragraph [0129] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[83]] 76

MS-Pro-59-VH (SEQ ID NO: [[113]]106)

1 QVQLQQSGPG LVKPSQTLSTCAISGDSVS SNSAAWNWIR QSPGRGLEWL
51 GRTYYRSKWY NDYAVSVKSR ITINPDTSKN QFSLQLNSVT PEDTAVYYCA
101 RSYYPDFDYW GQGTLVTVSS

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Please amend paragraph [0130] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[91]] 84 --

Please amend paragraph [0182] of the published application as follows:

-- The invention also provides isolated nucleic acid molecule that hybridizes under high stringency conditions to polynucleotides having SEQ ID NO:30 through SEQ ID NO:51 and SEQ ID NOS: ~~62, 64-65, 67, 69-71, 73-76-78-80, 82-87, 89, 91~~ 55, 57-58, 60, 62-64, 66-69, 71-73, 75-80, 82, 84 or the complement thereof. As used herein, highly stringent conditions are those which are tolerant of up to about 5-20% sequence divergence, preferably about 5-10%. Without limitation, examples of highly stringent (-10° C. below the calculated T_m of the hybrid) conditions use a wash solution of 0.1.times.SSC (standard saline citrate) and 0.5% SDS at the appropriate T_i below the calculated T_m of the hybrid. The ultimate stringency of the conditions is primarily due to the washing conditions, particularly if the hybridization conditions used are those which allow less stable hybrids to form along with stable hybrids. The wash conditions at higher stringency then remove the less stable hybrids. A common hybridization condition that can be used with the highly stringent to moderately stringent wash conditions described above is hybridization in a solution of 6xSSC (or 6xSSPE), 5x Denhardt's reagent, 0.5% SDS, 100 µg/ml

denatured, fragmented salmon sperm DNA at an appropriate incubation temperature T_i . See generally Sambrook et al. [1] (Molecular Cloning: A Laboratory Manual, 2d edition, Cold Spring Harbor Press (1989)) for suitable high stringency conditions. - -

Please amend paragraph [0232] of the published application as follows:

- - FIG. 30 displays the polynucleotide sequences of the specific V_L and V_H domains of MSPRO2 (SEQ ID NO: [74] 67 and [84] 77); MSPRO11 (SEQ ID NO: [70] 63 and [85] 78); MSPRO12 (SEQ ID NO: [75] 68 and [89] 82); MSPRO21 (SEQ ID NO: [67] 60 and [78] 71); MSPRO24 (SEQ ID NO: [64] 57 AND [79] 72); MSPRO26 (SEQ ID NO: [71] 64 AND [86] 79); MSPRO28 (SEQ ID NO: [62] 55 AND [80] 73); MSPRO29 (SEQ ID NO: [65] 58 AND [87] 80); MSPRO54 (SEQ ID NO: [73] 66 AND [82] 75); MSPRO55 (SEQ ID NO: [69] 62 AND [83] 76); and MSPRO59 (SEQ ID NO: [76] 69 AND [91] 84). The sequences include the framework domains 1-4 and the CDR domains 1-3. SEQ ID NO: [61] 54, SEQ ID NO: [63] 56, SEQ ID NO: [66] 59, SEQ ID NO: [68] 61, and SEQ ID NO: [73] 65 denote herein the polynucleotide sequences of the parent V_L (kappa or lambda) strands. SEQ ID NO: [77] 70, SEQ ID NO: [81] 74, SEQ ID NO: [88] 81 and SEQ ID NO: [90] 83 denote herein the polynucleotide sequences of the V_H parent strands. - -

Please replace TABLE 1F of the published application as follows:

| <u>Peptide pairs</u> fragment | | | | |
|----------------------------------|-----------------------|-----------------------|----------------|---------------|
| antibody # | V heavy chain CDR3 | V light chain CDR3 | V heavy chain | V light chain |
| MSPRO2 | SEQ ID NO: 8 | SEQ ID NO: 9 | SEQ ID NO: 96 | SEQ ID NO: 85 |
| MSPRO12 | SEQ ID NO: 12 | SEQ ID NO: 13 | SEQ ID NO: 98 | SEQ ID NO: 87 |
| MSPRO59 | SEQ ID NO: 24 | SEQ ID NO: 25 | SEQ ID NO: 106 | SEQ ID NO: 95 |
| MSPRO11 | SEQ ID NO: 10 | SEQ ID NO: 11 | SEQ ID NO: 97 | SEQ ID NO: 86 |
| MSPRO21 | SEQ ID NO: 14 | SEQ ID NO: 15 | SEQ ID NO: 99 | SEQ ID NO: 88 |
| MSPRO24 | SEQ ID NO: 16 | SEQ ID NO: 17 | SEQ ID NO: 100 | SEQ ID NO: 89 |
| MSPRO26 | SEQ ID NO: 18 | SEQ ID NO: 19 | SEQ ID NO: 101 | SEQ ID NO: 90 |
| MSPRO28 | SEQ ID NO: 26 | SEQ ID NO: 27 | SEQ ID NO: 102 | SEQ ID NO: 91 |
| MSPRO29 | SEQ ID NO: 20 | SEQ ID NO: 21 | SEQ ID NO: 103 | SEQ ID NO: 92 |
| MSPRO54 | SEQ ID NO: 22 | SEQ ID NO: 23 | SEQ ID NO: 104 | SEQ ID NO: 93 |
| MSPRO55 | SEQ ID NO: 28 | SEQ ID NO: 29 | SEQ ID NO: 105 | SEQ ID NO: 94 |

Please replace TABLE 1G of the published application as follows:

| <u>Nucleotide pairs</u> fragment | | | | |
|-------------------------------------|-----------------------|-----------------------|---------------|---------------|
| antibody # | V heavy chain CDR3 | V light chain CDR3 | V heavy chain | V light chain |
| MSPRO2 | SEQ ID NO: 30 | SEQ ID NO: 31 | SEQ ID NO: 77 | SEQ ID NO: 67 |
| MSPRO12 | SEQ ID NO: 34 | SEQ ID NO: 35 | SEQ ID NO: 82 | SEQ ID NO: 68 |
| MSPRO59 | SEQ ID NO: 50 | SEQ ID NO: 51 | SEQ ID NO: 84 | SEQ ID NO: 69 |
| MSPRO11 | SEQ ID NO: 32 | SEQ ID NO: 33 | SEQ ID NO: 78 | SEQ ID NO: 63 |
| MSPRO21 | SEQ ID NO: 36 | SEQ ID NO: 37 | SEQ ID NO: 71 | SEQ ID NO: 60 |
| MSPRO24 | SEQ ID NO: 38 | SEQ ID NO: 39 | SEQ ID NO: 72 | SEQ ID NO: 57 |
| MSPRO26 | SEQ ID NO: 40 | SEQ ID NO: 41 | SEQ ID NO: 79 | SEQ ID NO: 64 |
| MSPRO28 | SEQ ID NO: 42 | SEQ ID NO: 43 | SEQ ID NO: 73 | SEQ ID NO: 55 |
| MSPRO29 | SEQ ID NO: 44 | SEQ ID NO: 45 | SEQ ID NO: 80 | SEQ ID NO: 58 |
| MSPRO54 | SEQ ID NO: 46 | SEQ ID NO: 47 | SEQ ID NO: 75 | SEQ ID NO: 66 |
| MSPRO55 | SEQ ID NO: 48 | SEQ ID NO: 49 | SEQ ID NO: 76 | SEQ ID NO: 62 |